Mid-Year Student Movement in DC

A Report from the Division of Data, Accountability, and Research
Office of the State Superintendent of Education, District of Columbia

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Introduction

Student mobility has consequences for students, schools, neighborhoods, and public policy. Changing schools in the middle of an academic year can be disruptive to the students moving, to the schools they are leaving, and to the schools in which they are enrolling.[1, 2, 3, 4, 5] High student mobility is also associated with higher levels of dropping out.[6] While parents may transfer their children's schools in search of a higher quality education, research suggests that school changes in low-income neighborhoods do not lead children to attend higher ranked schools and, in fact, actually result in children attending schools with lower performance levels.[7]

In 2013, OSSE released an analysis showing that thousands of students transferred into, out of, and between schools in the District of Columbia Public Schools (DCPS) and public charter schools (PCS) during school year (SY) 2011-2012.[8] This paper updates that analysis and adds two years of data (SY 2012-2013 and 2013-2014), with a focus on:

- What local data reveal about mid-year student mobility in the District of Columbia, including:
  - Total movement,
  - Movement into and out of DC, and
  - Movement between DCPS and public charter school sectors.
- How other states are measuring student movement.
- A deeper local analysis of mid-year mobility among students who change schools during the school year but stay enrolled in DCPS or public charter schools, including:
  - patterns and trends,
  - demographics, and
  - potential correlations with assessment scores.
- Next steps for research on mid-year student mobility.
- Implications of this analysis for research, analysis, policy and practice in the District of Columbia.

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[1] South, J., Haynie, D.L., and Bose, S. (2007). Student Mobility and School Dropout. *Social Science Research* (36).
[2] Gasper, J., DeLuca, S. and Estacion, A. (2012). Switching Schools: Reconsidering the Relationship Between School Mobility and High School Dropout. *American Educational Research Journal* (49).
[3] de la Torre, M. and Gwynne, J. (2009). Changing Schools: A Look at Student Mobility Trends in Chicago Public Schools Since 1995.
[4] Student Mobility. *Education Week. (2004).* http://www.edweek.org/ew/issues/student-mobility/.
[5] Rumberger, R.W. and Larson, K.A. (1998). Student Mobility and the Increased Risk of High School Dropout. *American Journal of Education* (107).
[6] Rumberger, R.W. and Arellano, B. (2007). Student and School Predictors of High School Graduation in California.
[7] Theodos, B., Coulton, C. and Budde, A. (2014). "Getting to Better Performing Schools: The Role of Residential Mobility in School Attainment in Low-Income Neighborhoods". *CityScape: A Journal of Policy Development and Research.*
[8] http://osse.dc.gov/sites/default/files/dc/sites/osse/release_content/attachments/DC%20Student%20Mobility%20Study%20%28Feb%202013%29.pdf

What local data reveal about mid-year student mobility in the District of Columbia

Using the monthly enrollment snapshots from the State Longitudinal Education Data (SLED) system (methods explained in Appendix A), OSSE analyzed school changes within the school year of students enrolled in public schools in DC.

Throughout this analysis student movement refers to school transfers. Additionally, movement into or out of the state is differentiated from student movement into or out of DCPS and public charter schools. The terms used throughout this paper include:

- To **Enter the State** means that the student transferred into a DCPS school or public charter school from a private school, a public school in another state, or a school in another country (for example). The same rationale applies for Exits from the State.
- To **Enter from a nonpublic, New Beginnings, or CFSA surrounding county school** means that the student transferred to a DCPS school or public charter school from a program funded by DC public dollars but not considered a public school in DC.
    - *Nonpublicly placed students* are those enrolled in and under the responsibility of DC Local Education Agencies (LEAs) but attend outside programs (sometimes public sometimes private) that can fully meet their specialized learning needs.
    - *New Beginnings students* are those in DC New Beginnings Youth Development Center, a secure residential treatment facility for District youth in Laurel, Maryland who receive educational services funded by DC.
    - *CFSA students in surrounding county schools* are those under the care of the DC Child and Family Services Agency (CFSA) who attend schools in Prince George's County and other surrounding counties.

  The same rationale applies for Exits to nonpublic programs, New Beginnings, or a school not considered as a public school in DC under Child and Family Services Agency.

This report focuses on students in pre-Kindergarten 3 (pre-K 3) through 12th grade, and the analysis in the main text does not include students enrolled in adult or alternative education programs. [9] While it is critical to capture student movement in adult and alternative programs, student movement in these programs is higher because of the distinct structures of these programs (for example, some adjult programs end mid-year) and because of student populations these programs serve. In analyzing the student movement data, OSSE found that 40 percent of gross movement can be attributed to students in adult and alternative programs, and so excluded the adult and alternative program movement to focus more specifically on the movement of students on a traditional educational trajectory in this report.[10]

Figure 1 below shows the overall pre-K 3-12 student movement in DCPS and public charter schools in SY2013-2014 from October 2013 to June 2014. While the vast majority of students (more than 92 percent) stayed enrolled in the same school from the beginning to the end of the school year, more than 6,100 public school students in the District, entered, exited, or had at least one change within or between DCPS schools or public charter schools. Of the students who transferred schools from October to June, approximately 75 percent either entered or exited the state.

[9] A full list of programs considered adult and alternative can be found in Appendix B.

[10] The analysis comparing overall mobility to that of students in adult or alternative programs can be found in Appendix C.

Figure 1: District student movement in SY2013-2014 (excluding adult & alternative programs); percentage as a rate of total student enrollment

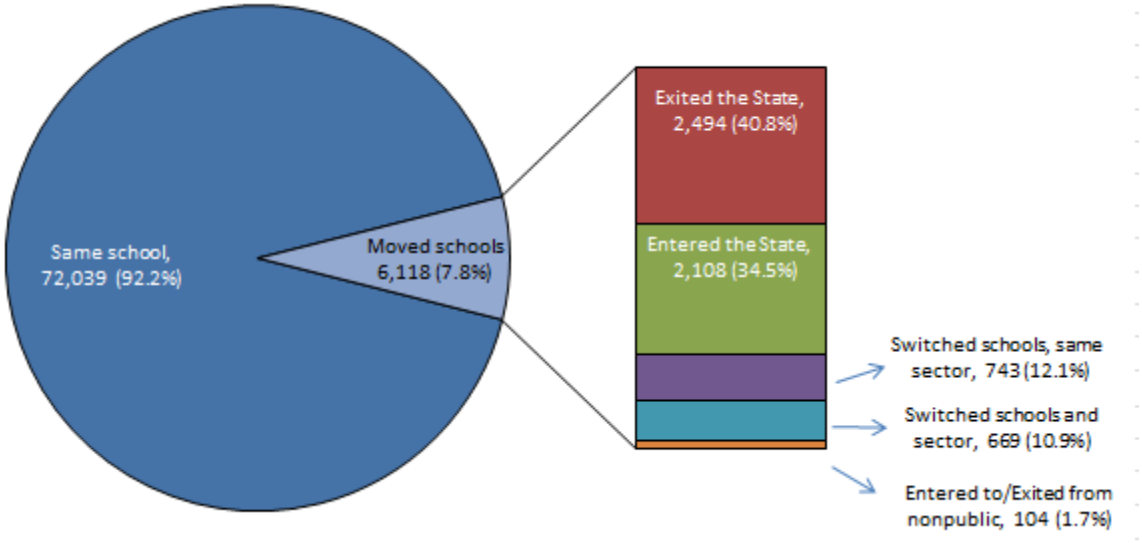


Chart 1 below shows the mid-year student movement across three school years, broken out by sector and excluding students in adult or alternative programs. The trends in the data are fairly consistent across years. Each year,

- The vast majority of students (92 percent) stayed in the same school.
- Most student movement is into and out of public schools in DC.
- The state lost more students than it gained, though the number and rate of loss are decreasing.
- The public charter school sector experienced a significant net loss of students, while DCPS experienced a net gain.

There are some noteworthy differences in the data between sectors, and those include:

- Many more students entered the state to DCPS schools than to public charter schools.
- Significantly more students transferred from public charter schools to DCPS schools mid-year than moved from DCPS to public charter schools.
- The number of students exiting the state is similar in both sectors, whether exiting from DCPS or public charter schools.

Chart 1: Mid-year student movement from October to June (excluding adult & alternative programs)[11]; rate represented as a percentage of total enrollment

		SY2011-2012		SY2012-2013		SY2013-2014	
		N	%	N	%	N	%
Summary	Gross movement	6,877	9.3%	5,577	7.4%	6,118	7.8%
	Net change - State	(1,137)	-1.5%	(575)	-0.8%	(386)	-0.5%
	net change - DCPS	511	1.1%	709	1.6%	890	1.9%
	net change - PCS	(1,666)	-5.8%	(1,338)	-4.4%	(1,330)	-4.1%
No school change	Subtotal	67,022	90.7%	70,202	92.6%	72,039	92.2%
	DCPS	40,642	88.3%	41,148	90.2%	41,792	89.9%
	PCS	26,380	92.5%	29,054	94.5%	30,247	93.5%
Entered the State…	Subtotal	2,037	2.8%	1,766	2.3%	2,108	2.7%
	to a DCPS school	1,875	4.1%	1,656	3.6%	1,819	3.9%
	to a PCS school	162	0.6%	110	0.4%	289	0.9%
Exited the State…	Subtotal	3,174	4.3%	2,341	3.1%	2,494	3.2%
	from a DCPS school	1,940	4.2%	1,426	3.1%	1,486	3.2%
	from a PCS school	1,234	4.3%	915	3.0%	1,008	3.1%
Switched schools, changed sectors…	Subtotal	638	0.9%	572	0.8%	669	0.9%
	DCPS to PCS	46	0.1%	32	0.1%	49	0.1%
	PCS to DCPS school	592	2.1%	540	1.8%	620	1.9%
Switched schools, same sector…	Subtotal	826	1.1%	784	1.0%	743	1.0%
	DCPS to DCPS school	761	1.7%	718	1.6%	673	1.4%
	PCS to PCS	65	0.2%	66	0.2%	70	0.2%
Other types of entries to… *from New Beginnings and nonpublic*	Subtotal	92	0.1%	30	0.0%	25	0.0%
	DCPS	92	0.2%	23	0.1%	19	0.0%
	PCS	0	0.0%	7	0.0%	6	0.0%
Other types of exits from… *to DYRS and nonpublic*	Subtotal	110	0.1%	84	0.1%	79	0.1%
	DCPS	62	0.1%	52	0.1%	33	0.1%
	PCS	48	0.2%	32	0.1%	46	0.1%

* This chart also excludes non-DC school moves including entrances, exits, and between sector changes that only took place between nonpublic schools, New Beginnings, and/or received educational services at a school not considered as a public school in DC under Child and Family Services Agency

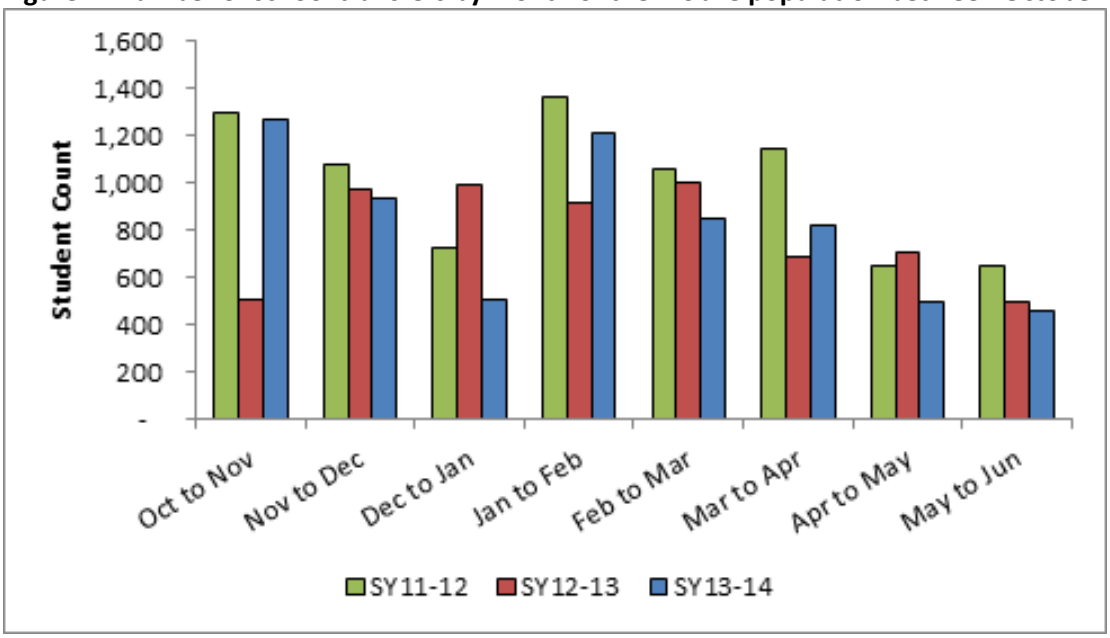
Transfers by month

Of all the students who moved between October and June, the frequency of transfers by month differs significantly from month to month. In SY2011-2012 and SY2013-2014, the number of transfers started high in the beginning of the year (over 1,200 transfers from October to November) and decreased each month through January. Then, in January, the number of transfers spiked again and decreased throughout the rest of the school year, with a slight bump from March to April, presumably due to the

[11] This same chart, showing the overall movement including that of students in adult and alternative programs appears in Appendix D.

data quality efforts needed to prepare student rosters for assessments. The difference in the pattern observed in SY2012-2013 is unclear and would require further investigation to better understand.

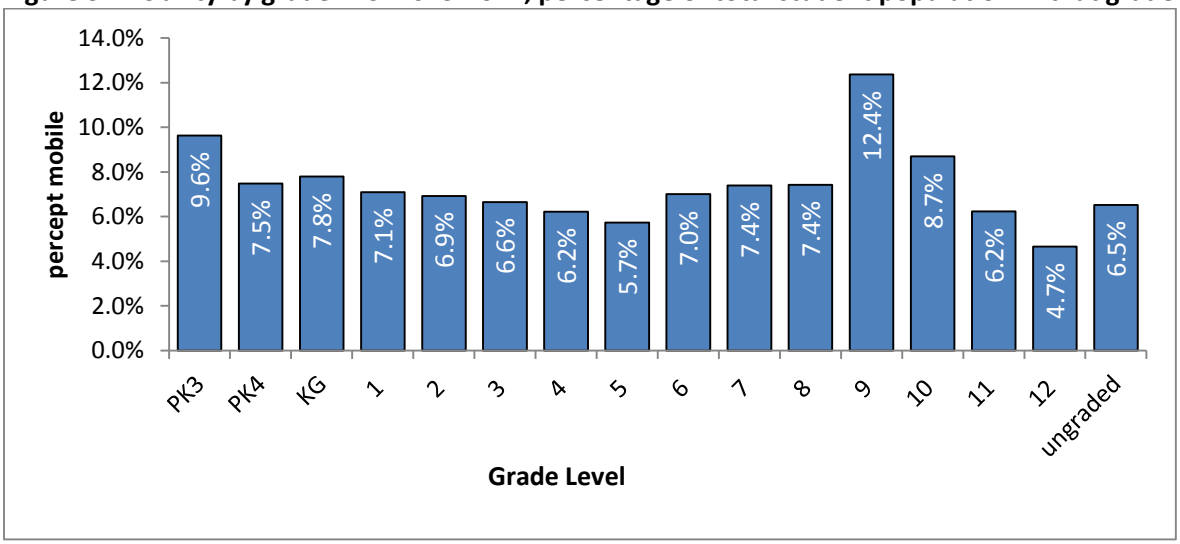
Figure 2: Number of school transfers by month of the mobile population between October and June



Mobility by grade

Looking at student mobility by grade level, Figure 3 below shows that in SY2013-2014 mobility was highest among 9th grade students and lowest among 12th grade students. The elementary grades, mobility starts very high in pre-K 3 and then decreases (with a slight increase in kindergarten) until students reach sixth grade.

Figure 3: Mobility by grade in SY2013-2014, percentage of total student population in that grade[12]



[12] The "Ungraded" category in the figure represents students enrolled in specialized education programs.

Inter- and intra-state mobility

Honing in on the movement into and out of the state, Chart 2 shows the counts of students who entered or exited public schools in DC from October to June. The rates in this chart represent the percentage of total entries or exits, respectively. For example, in SY2013-2014, 95 percent of all the students who exited DCPS from October to June left the state whereas 60 percent of all the students who exited public charter schools left the state. The data show that the overwhelming majority of entries to and exits from the DCPS and public charter schools from October to June are due to transfers into and out of public schools in DC altogether. The data also show that students who exit DCPS schools mid-year are much more likely to exit the state than those who exit public charter schools.

Chart 2: Student movement into and out of state from October to June (excluding adult and alternative programs); rate represented as a percentage of total movement within the same timeframes

		SY2011-2012		SY2012-2013		SY2013-2014	
		N	%	N	%	N	%
Entered State to…	Total	2,037	73.6%	1,766	74.6%	2,108	75.2%
	DCPS	1,875	73.3%	1,656	74.6%	1,819	74.0%
	PCS	162	77.9%	110	73.8%	289	84.0%
Exited State from…	Total	3,174	80.9%	2,341	78.1%	2,494	76.9%
	DCPS	1,940	94.7%	1,426	94.4%	1,486	94.8%
	PCS	1,234	65.8%	915	61.5%	1,008	60.2%

Chart 3 below highlights the movement between sectors from October to June. Again, the rates in this chart represent the percentage total entries (gains) or exits (losses). Over the past three school years, the number of students who moved from public charter schools to DCPS from October to June is more than 12 times higher than the number of students who move in the opposite direction. Further, in all three years, more than 30 percent of public charter school enrollment losses were from students transferring from public charter schools to DCPS.

Chart 3: Student movement between sectors from October to June (excluding adult/alt programs); rate represented as a percentage of total gain/loss

		SY2011-2012		SY2012-2013		SY2013-2014	
		N	%	N	%	N	%
Loss	From DCPS to PCS	46	2.2%	32	2.1%	49	3.1%
Gain			22.1%		21.5%		14.2%
Loss	From PCS to DCPS	592	31.6%	540	36.3%	620	37.0%
Gain			23.1%		24.3%		25.2%

With three years of data to compare, the trends shown in Charts 2 and 3 become more powerful. First, the data support the assertion that students transfer from public charter schools to DCPS schools mid-year at a disproportionate rate. More importantly, the data affirm the major takeaway from the first

mobility analysis: Many more pre-K through -12th grade students transfer into or exit from the public schools in DC from out of state than from between sectors between October and June of a given school year. Both of these findings should be of critical concern to policymakers.

How other states are measuring student movement

Since the publication of its first mobility analysis, OSSE has also conducted research into how other states measure and report mid-year student mobility. The following section describes the varying approaches taken by states.

The Colorado Department of Education has calculated and reported student mobility rates for the last seven school years, with a focus on three specific measures:

- Student stability rate, which measures enrolled students who remain in a school or district in a given year.

- Mobility incidence rate, which measures all mobility (unduplicated) of the number of times students moved into or out of the school or district in a given year.

- Student mobility rate, which consists of an unduplicated count of kindergarten through 12th grade students who moved into or out of the school or district in a given year, divided by the total number of students who were part of the same membership base at any time during that year.

In 2014, Georgia's Governor's Office of Student Achievement published a report that calculated a churn rate for each school and district, calculated as student entries and exits among students in the audited enrollment. Regression analysis of results noted several correlations, including that as the percentage of students with disabilities increased, so did a school's churn rate.

The Illinois State Board of Education has published student mobility rates on state, district, and school report cards since 2010.The measure reports the percentage of students who transfer in or out of schools during a given school year (excluding graduates).

The Massachusetts Department of Elementary and Secondary Education (ESE) reports on three measures of student mobility: intake, churn, and stability. ESE calculates these rates at the state, district, and school levels. The metrics are:

- Intake rate, which measures the number of students who enroll in the state, an LEA, or school after the beginning of the school year.

- Churn rate, which measures the number students transferring into or out of a public school or LEA throughout the course of a school year.

- Stability rate, which measures how many students remain in a district or school throughout the school year.

Using these calculations, the Massachusetts Department of Elementary and Secondary Education reported that the statewide churn rate in SY2008-2009 was approximately 10 percent and that student mobility in Massachusetts affected disadvantaged students more than other groups. For example, in SY2008-2009, more than half (53.1 percent) of the mobile students were classified as low income as compared with 30.7 percent of overall population.

Rates for all three metrics are publicly reported on the state report card – at the state, LEA, and school levels.

Since SY2012-2013, the Oregon Department of Education has published state and district mobility rates on its public report cards. Students are considered mobile if they:

- Attend more than one school during a school year;
- Enter public schools in a state late;
- Exit public schools in a state early without earning a diploma, or certificate; or
- Have significant gaps in enrollment.

Since 2005, the Rhode Island Department of Education has reported mobility and stability indexes. These data are available at the state, district and school levels, as well as aggregated by elementary, middle, and high school. Together, the two indicators aim to describe the degree of turnover in schools and its potentially disruptive effect on the classroom environment.

The mobility index measures the rate of student turnover, or the percentage of students who moved into or out of the school during the school year. The stability index measures the proportion of the total student enrollment who stayed in the same school (defined as 170 days or more) throughout the school year.

The Office of the Superintendent of Public Instruction (OSPI) in Washington State has calculated a "not staying enrolled" measure since SY2011-2012 for all schools. The measure aims to track students who are enrolled in a school on October 1 of the school year and answer the question, "Did they or didn't they remain enrolled in that school for the entire school year?" Values can range from 0 to 1 (or 0 percent to 100 percent); the higher the number, the higher the mobility.

Washington State also calculates this measure at the district level, using a weighted average (by enrollment) of school mobility within each district.

A deeper local analysis of mid-year mobility among continuously enrolled students

OSSE has explored multiple approaches to measuring student movement. One particular analysis conducted focuses on a subpopulation of the mobile students; the mobile students who stay enrolled in public schools in DC throughout the entire school year. Because these students are present in public

schools in DC all year, the most is known about their characteristics.[13] These are students who move between schools, LEAs, and sectors in a given school year, which is of continuing interest to policymakers as a measure of equity and quality among schools and for students.

Total Movement

Over the past three school years between 86 and 89 percent of students who began the school year in a DCPS or public charter school were continuously enrolled in a public school in DC all school year. Of this continuously enrolled population, 97 percent stayed at the same school all year. At the same time, more than 10,000 DC students changed each school year. This included thousands of students who were not continuously enrolled in public schools in DC and as well as the roughly 2,000 students who stayed enrolled in DCPS and public charter schools. These trends are shown below in Chart 4.

Chart 4: Continuously Enrolled Population Overview

	SY2011-2012	SY2012-2013	SY2013-2014
Total enrollment	84,953	86,207	91,264
Continuously enrolled population	73,268 (86.2%)	77,034 (89.4%)	79,212 (86.8%)
Continuously enrolled mobile pop	2,055 (2.8%)	1,701 (2.2%)	1,969 (2.5%)

Movement by demographic

Among the continuously enrolled population, economically disadvantaged,[14] special education, African American, and male students were all disproportionately represented (Chart 5). Specifically, among continuously enrolled mobile students over the three years studied:

- Nearly all (between 87 and 91 percent) were African American (as compared to between 73 and75 percent of total enrollment).
- Nearly three-quarters (between 71 and 88 percent) were low-income (as compared to between 58 and 75 percent of total enrollment).
- Between more than one-quarter and one-third (between 28 and 37 percent) were special education students (as compared to 15 percent of total enrollment).
- More than half (between 55 and 58 percent) were male (as compared to 50 percent of total enrollment).

Limited English Proficient (LEP), White, and Hispanic students made up smaller shares of the mobile student population than of the overall student population.

[13] Questions remain about what happens to students who leave altogether. While it is important to ask and answer these questions, that is a different analysis and would require data sharing among school districts within the region and, possibly, across the country.

[14] Low-income includes students are those students who were directly certified as eligible in TANF or SNAP, who qualified for free or reduced-priced lunch, or who enrolled in schools that participated in the Community Eligibility Provision (CEP).

Chart 5: Characteristics of Continuously Enrolled Mobile Students

	SY2011-2012		SY2012-2013		SY2013-2014	
	% mobile population	% statewide enrollment	% mobile population	% statewide enrollment	% mobile population	% statewide enrollment
Total State	100%	3%	100%	2%	100%	2%
Low income	71%	60%	73%	58%	88%	75%
SPED	34%	15%	37%	15%	28%	15%
LEP	6%	9%	3%	9%	4%	9%
Black	87%	75%	91%	74%	91%	73%
White	2%	8%	2%	8%	2%	9%
Hispanic	9%	14%	5%	15%	6%	16%
Other race/ethnicity	1%	3%	1%	3%	1%	3%
Male	55%	50%	58%	50%	58%	50%

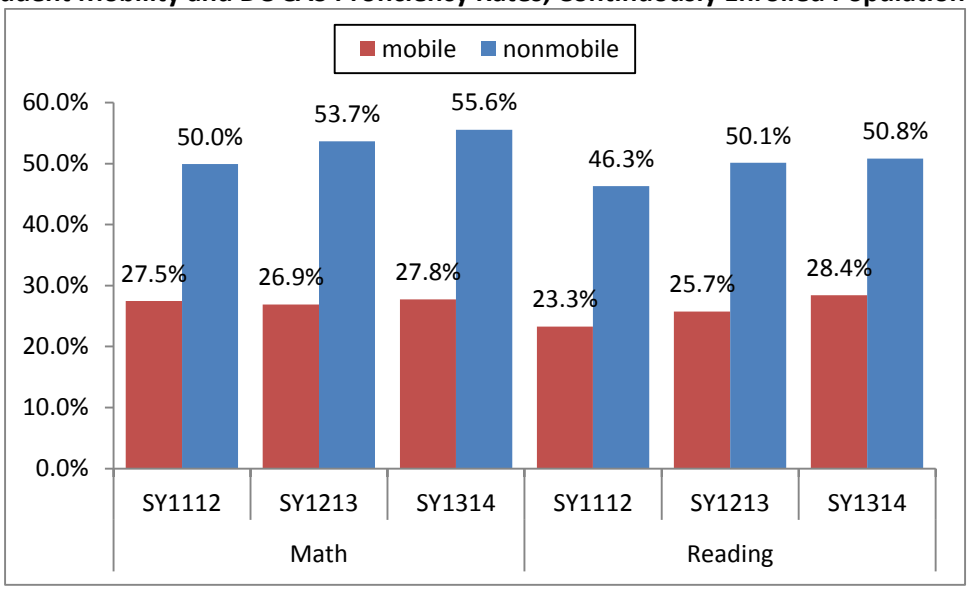
DC CAS performance

Figure 4 compares the proficiency rates of mobile and non-mobile continuously enrolled students on the DC Comprehensive Assessment System or DC CAS reading and math assessments. This chart shows a negative correlation between mobility and proficiency, with much lower rates of mobile continuously enrolled students reaching proficiency than their non-mobile peers in either subject in any of the three school years analyzed.

These data have not been adjusted to control for any factors that might influence these comparisons. Still, given the wide gap in performance on state assessments between low-income, African American, and special education students and their counterparts[15] and also that these populations are disproportionately represented in the continuously enrolled mobile population, it is not a surprise to see such a stark difference in performance between the mobile and non-mobile continuously enrolled students.

[15] http://www.edweek.org/ew/issues/achievement-gap/

Figure 4: Student Mobility and DC CAS Proficiency Rates, Continuously Enrolled Population



Next steps for research: Filling in the bigger picture

This report represents a step forward in examining mid-year mobility among students in DCPS and public charter schools in the District of Columbia, based on readily available data. Developing a fuller picture of mid-year student mobility that could inform policy and practice decision making should include research to:

- **Gain a more nuanced understanding of factors that promote or inhibit mid-year student movement;**
- **Uncover mobility trends among highly mobile students who transfer schools multiple times within a single school year; and**
- **Learn more about between-year student mobility, including mobility caused by school closings.**

Little is known empirically about what drives student movement. For example, is student movement prompted by parents seeking a better educational experience or are moves prompted by other factors, such as housing changes or school disciplinary action? How long do mobility-associated negative effects persist?

Better, more robust information about what drives mobility would help support the development of policies and practices to address it in a way that minimizes educational disruption for students, schools, and neighborhoods. This would include developing a better understanding of the higher burden of student intake on DCPS.

Additional specific areas for research could include the following issues:

- **Understand differences between mobility within public schools in DC (students who change schools but stay in DCPS or public charter schools) and students who leave entirely and also the most meaningful ways to capture and report on these different types of movement.**

Most students who are mobile leave DCPS and public charter schools entirely, but we know little about where they go (home schooling, other jurisdictions, private school, etc.). Knowing the full scope of mobility would help develop the most effective policies for addressing it. OSSE is currently exploring bilateral data sharing agreements with surrounding states to enable the exchange K-12, postsecondary, and workforce data to help DC track between-state mobility as well as DC student educational outcomes.

Other states and regions have begun implementing initiatives that could serve as models for DC. For example, Georgia and several other states are piloting a data system that collects data from all states on enrollments and exits from the public schools. The surrounding states can then query that system to see if the student that exited their state showed up in one of the other states.[16] The Western Interstate Commission for Higher Education recently released findings from analysis of a combined dataset covering students in four states participating in a Multistate Longitudinal Data Exchange Pilot focused on participation in postsecondary education, degree completion, employment, and geographic mobility. [17]

- **Further investigate the phenomenon of churn, including whether it is a worthwhile metric to track at the school and LEA levels.**

"Churn" is the most comprehensive measure of student movement, in that it represents the number students transferring both into and out of a school or LEA throughout the course of a school year. How informative would tracking churn be to educational stakeholders in the District, including parents?

In terms of mobility within the public schools in DC, OSSE collects daily enrollment snapshots that show students' school of enrollment. What are the most meaningful mobility metrics to report back to educational stakeholders in the District?

- **Look specifically at highly mobile students who transfer schools multiple times within a single school year and any distinct characteristics they may have.**

In addition to considering the overall mobility, we hope to look more closely at students who transfer schools multiple times within a single school year to better understand and think through supports for these highly mobile students.

- **Track between-year mobility, including the mobility caused by school closings.**

While the focus of this report has been mid-year mobility, we know there is also mobility that takes place between years. For example, school closings also cause student mobility that can affect academic success. In the last several years, numerous DCPS and public charter schools have closed, creating unexpected mobility for students. How similar or different are the effects of this type of mobility, when compared to mid-year mobility? What typically happens to the students affected by closures? What policy and practice responses would improve re-enrollment and minimize disengagement for these students?

Implications of this analysis

[16] http://www.centerdigitaled.com/news/Student-Record-Exchanges-Meet-the-Digital-Age.html
[17] http://www.wiche.edu/info/longitudinalDataExchange/publications/MLDE_GlimpseBeyond.pdf

The data presented here suggest a number of implications for education policy and practice in the District of Columbia. Among these implications are whether the District should:

- **Consider using a mobility measure when calculating "at risk" funding.**

Currently, the at-risk weight for the Uniform Per Student Funding Formula (UPSFF) applies to students who are:

  - Homeless,
  - In foster care,
  - Qualify for Temporary Assistance for Needy Families (TANF) or the Supplemental Nutrition Assistance Program (SNAP),
  - Overage (defined as high school students who are one year older than, or more, than the expected age for the grade in which they are enrolled).

Adding a weight for mobility could help provide additional support students whose academic success could be compromised by mobility. Utah recently added such a weight to its funding formula,[18] which applies to students who are enrolled less than 160 days (or its equivalent) in one school within one school year.

- **Consider creating financial incentives for schools and LEAs to prevent and reduce mid-year mobility and mitigate its potential negative effects on student outcomes.**

Could financial incentives – whether positive or negative – affect the ability of schools to reduce the mid-year mobility of their students? For example, would paying UPSFF dollars in installments throughout the school year, as opposed to a lump sum payment based on October enrollment, affect mid-year mobility?

The office of the Deputy Mayor for Education is exploring the possibility of revising the LEA payment system to pay all LEAs the same way for equity purposes which also may aim to reduce student mobility. In addition, a recent report on the accountability of public charter school funding, the Office of the District of Columbia Auditor recommended that OSSE develop policies and procedures to ensure that funding more efficiently follows students, including adjusting payments to public charter schools for student movement that occurs after the enrollment audit.[19]

- **Explore the need for and feasibility of other structural responses for public schools in DC, given the high mobility.**

One model to consider is the Department of Defense (DoD) schools. Military-connected students experience an average of six to nine moves between kindergarten and high school graduation, according to the Military Child Education Coalition. DoD has implemented programs specifically designed at reducing the negative impacts of mobility, and these programs have yielded positive results in student achievement.[20]

[18] http://www.rules.utah.gov/publicat/code/r277/r277-708.htm
[19] http://dcauditor.org/sites/default/files/DCA162015.pdf
[20] http://www.edweek.org/ew/issues/student-mobility/#

Appendix A

Throughout this analysis, mobility is defined as a student enrollment or exit from a school. The mobility dataset is built from monthly snapshots of the statewide enrollment as reported in the Statewide Longitudinal Education Data (SLED) system. The snapshot dates for each month are shown in the table below.

Snapshot Dates			
Month	2011-2012	2012-2013	2013-2014
October	10/7/2011	10/17/2012	10/7/2013
November	11/7/2011	11/6/2012	11/5/2013
December	12/9/2011	12/6/2012	12/5/2013
January	1/5/2012	1/14/2013	1/6/2014
February	2/6/2012	2/5/2013	2/5/2014
March	3/5/2012	3/5/2013	3/5/2014
April	4/11/2012	4/5/2013	4/7/2014
May	5/4/2012	5/6/2013	5/5/2014
June	6/6/2012	6/5/2013	6/6/2014

Each snapshot includes all students enrolled in DC public schools (DCPS) and DC public charter schools (PCS) with identifiable Unique Student Identifiers (USIs). Unlike the mobility dataset created last year, this dataset includes students categorized as adults as well as students attending nonpublic schools. The enrollment data in SLED and in the snapshots are self-reported by the LEAs. The information is updated on a daily basis via data feeds from the LEA student information systems.

One of the main issues confronted in using this snapshot data was the presence of duplicative student enrollments; cases in which a student was enrolled at two different schools at the same time. In any given snapshot, a student may have been transitioning between schools but still been actively enrolled in both student information systems. While many of the duplicative enrollments are simply data issues caused by poor enrollment record maintenance there are some legitimate reasons why duplicative enrollments occur. For example, adult students may be enrolled and attending multiple programs at once. Whatever the cause, all duplicative enrollments were resolved for analysis.

In resolving these, OSSE made the assumption that the accuracy of the enrollment data improved as the school year progressed. OSSE provides technical support to LEAs prior to the enrollment audit and the DC CAS to help LEAs clean up any data issues. Additionally, duplicative enrollments caused by enrollment transitions should presumably resolve themselves by the following month and the student should appear uniquely enrolled at the receiving school by the next snapshot.

Guided by these assumptions, the duplicative enrollments were resolved starting from the end of the school year and working backwards towards the beginning of the school year. Students with duplicate enrollments were assigned to the receiving school in cases in which the student appeared as enrolled only in the receiving school in a subsequent snapshot. In the example shown below, a student with the unique student identifier 1000 has a duplicate enrollment in both the April and May snapshots. By the described method, Student 1000 would be assigned to School A in the March snapshot, and School B in the April, May and June.

Unique Student Identifier	March	April	May	June
1000		School B	School B	School B
1000	School A	School A	School A	-

For duplicate enrollments that couldn't be resolved with this method, the student was marked flagged for that snapshot. This imperfect methodology surely resulted in some incorrect decisions about a student's enrollment on any given snapshot but this error would only affect the timing of student transfers rather than the prevalence of mobility. Going back to the example above, though student 1000 may not have actually been at School B in May, it is still true that student 1000 did transfer from School A to School B during the school year.

Appendix B: Alternative and/or Adult Programs

Sector	School Name	Notes
DCPS	Ballou STAY	
PCS	Booker T Washington PCS	
PCS	Briya Public Charter School*	
PCS	Carlos Rosario International PCS Harvard Street Campus	
DCPS	CHOICE Academy at Emery	
PCS	Community College Preparatory Academy PCS	Opened in SY13-14
DCPS	Incarcerated Youth Program	
PCS	Latin American Youth Center Career Academy	Opened in SY12-13
DCPS	Luke Moore Alternative HS	
PCS	Maya Angelou Evans Campus PCS	
PCS	Maya Angelou Young Adult Learning Center	Opened in SY12-13
PCS	Options PCS	
DCPS	Roosevelt STAY at MacFarland	
DCPS	Spingarn STAY	Closed after SY12-13
PCS	The Next Step PCS	
DCPS	Washington Metropolitan HS (formerly YEA)	
DCPS	Youth Services Center	
PCS	Youthbuild PCS	
DYRS	Maya Angelou New Beginnings	

* Partially adult, partially pre-K 3 and pre-K 4

Appendix C: Extent of overall mobility from October to June in SY2013-2014 that can be attributed to students in adult or alternative programs

		All students	Adult/Alt program students	Percent of total
Summary	Gross movement	10,049	3,931	39%
	Net change - State	-825	-439	53%
	net change - DCPS	949	59	6%
	net change - PCS	-1,858	-528	28%
No school change	Subtotal	76,528	4,489	6%
	DCPS	43,289	1,497	3%
	PCS	33,239	2,992	9%
Entered the State…	Subtotal	3,656	1,548	42%
	to a DCPS school	2,421	602	25%
	to a PCS school	1,235	946	77%
Exited the State…	Subtotal	4,481	1,987	44%
	from a DCPS school	2,093	607	29%
	from a PCS school	2,388	1,380	58%
Switched schools, changed sectors…	Subtotal	779	110	14%
	DCPS to PCS school	64	15	23%
	PCS to DCPS school	715	95	13%
Switched schools, same sector…	Subtotal	957	214	22%
	DCPS to DCPS school	845	172	20%
	PCS to PCS	112	42	38%
Other types of entries to… *from DYRS and nonpublic*	Subtotal	46	21	46%
	DCPS	39	20	51%
	PCS	7	1	14%
Other types of exits from… *to DYRS and nonpublic*	Subtotal	130	51	39%
	DCPS	69	36	52%
	PCS	61	15	25%

Appendix D: Mid-year student movement from October to June (all programs pre-K through 12 including adult and alternative education); rate represented as a percentage of total enrollment

		SY2011-2012		SY2012-2013		SY2013-2014	
		N	%	N	%	N	%
Summary	Gross movement	10,745	13.1%	9,357	11.2%	10,049	11.6%
	Net change - State	(1,540)	-1.9%	(1,341)	-1.6%	(825)	-1.0%
	net change - DCPS	324	0.7%	447	0.9%	949	1.9%
	net change - PCS	(1,896)	-5.7%	(1,779)	-5.0%	(1,858)	-4.9%
No school change	Subtotal	70,989	86.9%	74,290	88.8%	76,528	88.4%
	DCPS	41,996	85.0%	42,447	87.3%	43,289	87.4%
	PCS	28,993	87.7%	31,843	89.2%	33,239	87.9%
Entered the State…	Subtotal	3,594	4.4%	3,138	3.8%	3,656	4.2%
	to a DCPS school	2,636	5.3%	2,218	4.6%	2,421	4.9%
	to a PCS school	958	2.9%	920	2.6%	1,235	3.3%
Exited the State…	Subtotal	5,134	6.3%	4,408	5.3%	4,481	5.2%
	from a DCPS school	2,937	5.9%	2,288	4.7%	2,093	4.2%
	from a PCS school	2,197	6.6%	2,120	5.9%	2,388	6.3%
Switched schools, changed sectors…	Subtotal	742	0.9%	660	0.8%	779	0.9%
	DCPS to PCS school	72	0.1%	53	0.1%	64	0.1%
	PCS to DCPS school	670	2.0%	607	1.7%	715	1.9%
Switched schools, same sector…	Subtotal	1,031	1.3%	989	1.2%	957	1.1%
	DCPS to DCPS school	929	1.9%	885	1.8%	845	1.7%
	PCS to PCS school	102	0.3%	104	0.3%	112	0.3%
Other types of Entries to… *from DYRS and nonpublic*	Subtotal	106	0.1%	50	0.1%	46	0.1%
	DCPS	104	0.2%	39	0.1%	39	0.1%
	PCS	2	0.0%	11	0.0%	7	0.0%
Other types of exits from… *to DYRS and nonpublic*	Subtotal	138	0.2%	112	0.1%	130	0.2%
	DCPS	77	0.2%	76	0.2%	69	0.1%
	PCS	61	0.2%	36	0.1%	61	0.2%

* This chart excludes non-DC school moves including entrances, exits, and between sector changes that only took place between nonpublic schools, New Beginnings, and/or received educational services at a school not considered as a public school in DC under Child and Family Services Agency